

### **REMARKS**

Claims 1-5, 7, 9 and 10 are pending. Claims 13-33 were withdrawn by a provisional election and have been cancelled. Claims 6, 8, 11 and 12 have also been cancelled. Claim 1 has been amended, incorporating the subject matter disclosed in, e.g., Examples 3 and 4 of the specification. No new matter is added. Favorable consideration of the currently pending claims is respectfully requested in light of the foregoing amendments and following remarks.

#### ***Restriction Requirement***

Applicant confirms the provisional election of Group I, Claims 1-12, drawn to “a composition with a porous substrate impregnated with a permanganate.” Claims 13-33 have been cancelled.

#### ***Rejections Under 35 U.S.C. § 102***

Claims 1, 2 7 and 9 are rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 3,957,059 to Rainer *et al.* (“Rainer”). Applicant respectfully traverses the rejection in view of the amendment presented above and the following remarks.

Rainer discloses activated alumina impregnated with 5-30% sodium permanganate (Rainer, col. 1, lines 5-18) formed by impregnating alumina with sodium permanganate and a basic sodium compound (e.g., sodium hydroxide) (col. 3, lines 7-18). All of filters disclosed Rainer’s examples were formed by solution impregnating the permanganate in sodium hydroxide.

Applicant has produced high capacity filtration media containing a permanganate such as sodium permanganate by using only an aqueous permanganate solution *without the use of compounds such as sodium hydroxide or sodium bicarbonate* (see, e.g., Examples 3 and 4 of the specification). The higher permanganate concentrations in this media provides substantial improvements in filtration capacity that enhances the life of the media.

Claim 1 of the present application, as amended, relates to a filtration media composition “*consisting essentially of* a porous substrate impregnated with a permanganate . . . having a solubility in water greater than that of potassium permanganate” and having a concentration in the composition of “at least approximately 8% permanganate salt by weight” (emphasis added). The amended “consisting essentially of” language of Claim 1 excludes ingredients that materially affect the basic and novel characteristics of the composition. See *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 224 U.S.P.Q. 409 (Fed. Cir. 1984). Thus, Claim 1, as amended, excludes from the filtration media additional compounds such as the sodium hydroxide disclosed in Rainer. Accordingly, applicant submits that Rainer, which utilizes a sodium hydroxide process to form its filter, does not anticipate Claim 1.

In view of the above, applicant respectfully requests that the rejection of Claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Claims 2, 7 and 9 are dependent on amended Claim 1 and incorporate all of its limitations. As Claim 1 is believed allowable over Rainer, these claims are also believed to

be allowable, and applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 102(b) be withdrawn.

Claims 1, 2 and 6-12 are rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,004,522 to England *et al.* ("England '522"). Claims 6, 8, 11 and 12 have been cancelled in this Amendment. Applicant respectfully traverses the rejection of the remaining claims in view of the amendment presented above and the following remarks.

England '522 discloses filtration media formed by impregnating alumina with potassium permanganate and at least 10% sodium bicarbonate (10-20% sodium bicarbonate in Example 9; 15-20% sodium bicarbonate in Examples 1 and 2). Although the specification indicates that sodium bicarbonate may be "optionally" added (col. 9, lines 21-23), none of the examples in England '522 disclose non-potassium permanganate impregnates, and none of the examples disclose filtration media formed without sodium bicarbonate. This is due to the *low solubility* of aqueous solutions of potassium permanganate.

Accordingly, applicant submits that England '522 fails to anticipate Claim 1 of the present application, as amended, and respectfully requests that the rejection of Claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Claims 2, 7, 9 and 10 are dependent on amended Claim 1 and incorporate all of its limitations. As Claim 1 is believed allowable over England '522, these claims are also believed to be allowable, and applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 102(b) be withdrawn.

***Rejections Under 35 U.S.C. § 103***

Claims 3-5 are rejected under 35 U.S.C. § 103 as obvious in view of England '522 in combination with U.S. Patent No. 5,942,323 to England ("England '323"). Applicant respectfully traverses the rejection in view of the amendment presented above and the following remarks.

England '323 does not cure the deficiencies of Rainer and England '522 discussed above. England '323 discloses filtration media formed by impregnating a substrate with potassium permanganate ***and sodium bicarbonate*** (see Examples 1-3). As with the England '522, this reference does not provide any examples of filtration media formed in the absence of sodium bicarbonate.

Moreover, Claims 3-5 are dependent on amended Claim 1 and incorporate all of its limitations. As Claim 1 is believed to be allowable, these claims are also allowable, and applicant respectfully requests that the rejection of these claims be withdrawn.

**CONCLUSION**

Applicant respectfully requests reconsideration of the present application in view of the foregoing. Applicant submits that all claims are in condition for allowance. Such action is courteously solicited. The Examiner is respectfully invited to contact the undersigned if there are matters that can be addressed by telephone at 404-815-6500.

Respectfully submitted,

/Christopher M. Durkee/

Christopher M. Durkee  
Reg. No. 59640

KILPATRICK STOCKTON LLP  
Customer Number 23370

Attorney Docket No. 45038/320968